



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,149	08/16/2000	Krishnamurthy Vaidy Anathan	US 000206	1287

7590 11/05/2002

Corporate Patent Counsel
U S Phillips Corporation
580 White Plains Road
Tarrytown, NY 10591

EXAMINER

PHAN, RAYMOND NGAN

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 11/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/639,149

Applicant(s)

VAIDY ANATHAN ET AL.

Examiner

Raymond Phan

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

Part III DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-10 are pending.
2. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2181.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-4 are rejected under 35 U.S.C. § 102(e) as being anticipated by Smyers et al. (US No. 6,233,637).

In regard to claim 1, Smyers et al. disclose a bridge comprising a plurality of interface registers that are configured to facilitate communication of data with a plurality of function units (see col. 3, lines 37-52); and a plurality of register transfer unit, operably coupled to the plurality of interface registers, that facilitate transfers of data among interface registers of the plurality of interface registers (see col. 3, line 64 through col. 4, line 7).

In regard to claims 2, 4, Smyers et al. disclose the bridge further comprising an instruction memory that is configured to contain register transfer instructions wherein the operable coupling of the plurality of register transfer units and the plurality of function units is effected via the register transfer instructions (see col. 11, lines 28-49).

In regard to claim 3, Smyers et al. disclose the bridge further comprising at least one datapath unit, operably coupled to the plurality of register transfer unit, that facilitate a transformation of at least one data item of the data that is transferred among the interface registers (see col. 6, lines 16-39).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Smyers et al. in view of Applicant Admitted Prior Arts (hereinafter AAPA).

In regard to claims 5, 10, Smyers et al. teach the claimed subject matter as discussed above except the teaching of DSP. However AAPA discloses the use of DSP (see page 2 of present application specification). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of AAPA within the system of Smyers et al. because it would help the bridge to process the digital data efficiently.

In regard to claim 6, Smyers et al. disclose receiver is configured to provide a digital input stream (see col. 3, lines 43-64); a bridge comprising a plurality of interface registers that are configured to facilitate communication of data with a plurality of function units (see col. 3, lines 37-52); and a plurality of register transfer unit, operably coupled to the plurality of interface registers, that facilitate transfers of data among interface registers of the plurality of interface registers (see col. 3, line 64 through col. 4, line 7). But Smyers et al. do not specifically teach a channel decoder, operably coupled to the receiver, that is configured to decode the digital input stream into a decoded signal stream. However AAPA disclose the channel decoder, operably coupled to the receiver, that is configured to decode the digital input stream into a decoded signal stream (see page 1 in the present application specification). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of AAPA within the system of Smyers et al. because it would modify the bridge to transmit simultaneously digital data across the bus structure.

In regard to claims 7, 9, Smyers et al. disclose the bridge further comprising an instruction memory that is configured to contain register transfer instructions

wherein the operable coupling of the plurality of register transfer units and the plurality of function units is effected via the register transfer instructions (see col. 11, lines 28-49).

In regard to claim 8, Smyers et al. disclose the bridge further comprising at least one datapath unit, operably coupled to the plurality of register transfer unit, that facilitate a transformation of at least one data item of the data that is transferred among the interface registers (see col. 6, lines 16-39).

Conclusion

8. All claims are rejected.

9. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

Garnett et al. (US No. 6,223,230) disclose a direct memory access in a bridge for a multi-processor system.

Shively et al. (US No. 6,418,161) disclose a spread spectrum bit allocation algorithm.

Takai (US No. 6,078,972) discloses a control system of FIFO memories.

Lee (US No. 6,055,937) discloses an universal decoder.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (703) 306-2756. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary Examiner, Ray Gopal can be reached on (703) 305-9647 or via e-mail addressed to ray.gopal@uspto.gov. The fax phone number for this Group is (703) 746-7239.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver

Art Unit: 2181

of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

RP

Raymond Phan

11/2/02

Gopal C. Ray
GOPAL C. RAY
PRIMARY EXAMINER
GROUP 2300